COUNTY OF SAN DIEGO
Great Government Through the General Management System – Quality, Timeliness, Value
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION   **CLASSIFIED**

GEOGRAPHIC INFORMATION SYSTEMS COORDINATOR   **Class No. 003502**

■ **CLASSIFICATION PURPOSE**

To perform the overall administration and operation of the Geographic Information Systems (GIS) providing information to health and social services, and other communities and neighborhoods throughout the County; and to perform related work as required.

■ **DISTINGUISHING CHARACTERISTICS**

Positions in this class are allocated only to the Health & Human Services Agency (HHSA). The Geographic Information Systems Coordinator reports to the Assistant Deputy Director, HHSA, and is responsible for the management of the overall GIS program for the Health & Human Services Agency. Under direction, this class is responsible for implementing GIS throughout the Health & Human Services Agency. GIS is implemented by working in concert with the executive team to develop a strategic plan to effectively and efficiently use GIS resources and all its capabilities to assess regional needs, and plan the systems, which the Agency will implement in order to provide services in the future.

■ **FUNCTIONS**

The examples of functions listed in the class specification are representative but not necessarily exhaustive or descriptive of any one position in the class. Management is not precluded from assigning other related functions not listed herein if such functions are a logical assignment for the position.

Essential Functions:

1.   Employs an enterprise GIS to support regional planning, resources management, and forecasting.

2.   Communicates to HHSA the activities and services provided by GIS.

3.   Provides thematic mapping capability to analyze and make decisions regarding client locations and HHSA services to forecast demands for future services.

4.   Coordinates long-term strategic planning for enterprise GIS.

5.   Represents HHSA on various technical committees.

6.   Coordinates with departments at the State and Federal level.

7.   Identifies opportunities for use and coordination of GIS across HHSA.

8.   Interacts with IT service provider.

9.   Develops guidelines or standards for collecting and sharing geographic data.

10.   Establishes means for increased access to geographic data.

11.   Maintains system security and system back up.

12.   Assigns, supervises, trains, and provides technical guidance to staff on GIS application uses.

13.   Coordinates and budgets for the purchasing of GIS software, hardware, and related equipment by researching item specification, costs, and delivery requirements.

14.   Recommends and prepares budget estimates for HHSA and vendor purchases of GIS software and equipment.

15.   Prepares department GIS budget.

16.   Updates GIS analytical functions and related technologies (Internet/Intranet, Oracle/SDE).

17.   Prepares and evaluates plans for procuring professional services as needed.

18.   Evaluates RFPs for enhancing the GIS environment.

19.   Enhances technical capacity to use GIS (e.g., hardware, software, training).

20.   Provides technical guidance to staff involved in interpreting satellite photos, preparing vegetation maps, and digitizing data for conversion to GIS usable formats.

21.   Identifies and addresses data sharing and confidentiality policies.

22.   Coordinates data acquisition and exchanges, project scheduling, and software training with outside agencies.

23.   Attends Board of Supervisors and Chief Administrative Officer briefings as needed.

24.   Provides responsive, high quality service to County employees, representatives of outside agencies, and members of the public by providing accurate, complete, and up-to-date information, in a courteous, efficient, and timely manner.

■ KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

– Principles and practices of system administration using GIS applications, databases, and mapping information systems.
– Principles of hardware and software installation, testing, and operation for GIS applications.
– Research methods and techniques related to collecting, analyzing, and evaluating geographic/land use related data.
– Environmental issues related to biology, geology, geography, land use, and environmental management; health and human services issues related to public health, behavioral health, child welfare, public assistance, emergency medical services, and gerontology.
– Principles of computer programming logic and concepts related to GIS and relational database management system (RDBMS) software platforms.
– Methods and techniques used for interpreting maps of various media, such as: hard copy maps, aerial photos, satellite imagery, and digitizing data for conversion to GIS usable formats.
– Purchasing principles and practices and cost factor analysis.
– Supervision and training principles and practices.
– Budget preparation methods and techniques.
– GIS application development.
– Principles of internet/intranet application development.
– Contract management.
– The General Management System in principle and in practice.
– County customer service objectives and strategies.

Skills and Abilities to:

– Identify and pursue potential funding options.
– Identify opportunities for use and coordination of GIS across enterprise.
– Develop guidelines or standards for collecting and sharing geographic data.
– Develop GIS applications, including web-based applications, using software such as VB and ArcGIS.
– Serve on inter-governmental committees and task forces and provide GIS technical expertise.
– Develop and implement a GIS system.
– Plan and coordinate multi-disciplinary work efforts in order to maintain timelines.
– Analyze complex problems and logically identify solutions.
– Supervise, plan and schedule technical staff to optimize efficiency.
– Operate and maintain computer equipment: terminals, printers, digitizers, electrostatic plotters and other peripheral equipment or workstations.
– Provide technical guidance to staff on GIS applications.
– Research GIS hardware and software equipment and applications, and make recommendations for purchase.
– Define user needs and make recommendations.
– Digitize data for conversion to GIS usable formats.
– Analyze a variety of geographic and mapping data, and develop logical conclusions and solutions.
– Communicate effectively in oral and written form.
– Create fields and analytical files for maps, plots and charts.
– Establish effective working relationships with management, employees, employee representatives, and the public representing diverse cultures and backgrounds.
– Treat County employees, representatives of outside agencies, and members of the public with courtesy and respect.
– Exercise appropriate judgment in answering questions and releasing information; analyze and project consequences of decisions and/or recommendations.

■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills, and abilities listed above. Examples of qualifying education/experience are: a bachelor's degree from an accredited college or university in geography, earth sciences, civil engineering, urban planning, information technology, computer science, or a closely related field, OR, a college-level GIS certificate; AND,

1. Four (4) years of experience as a Senior GIS Analyst or equivalent with the County of San Diego administering and operating a GIS system, using ARC/INFO or similar type software, to develop maps or other digital displays for land use or spatial analysis, one (1) year of which must have been at a lead or supervisory level, OR

2. Five (5) years of full-time experience administering and operating a GIS system in a large organization, using ARC/INFO or similar type software, to develop maps or other digital displays used for land use or spatial analysis, one (1) year of which must have been at a lead or supervisory level.

Note: Additional years of experience as described above may substitute for the education requirement on a year-for-year basis; OR, completion of related coursework from an accredited college or university may substitute for the experience requirement on a year-for-year basis.

■ ESSENTIAL PHYSICAL CHARACTERISTICS

The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification. Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.

Continuous upward and downward flexion of the neck. Frequent: sitting, repetitive use of hands to operate computers, printers, and copiers. Occasional: walking, standing, bending and twisting of neck, bending and twisting of waist, squatting, grasping, reaching above and below shoulder level, and lifting and carrying objects weighing up to 10 pounds.

■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment, or the ability to arrange necessary and timely transportation for field travel. Employees in this class may be required to use their own vehicle.

Certification/Registration

None Required.

Working Conditions

Office environment; exposure to computer screens and other basic office equipment.

Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 12 months (Civil Service Rule 4.2.5).

Geographic Information Systems Coordinator (Class No. 003502)　　　　Union Code: MA　　　Variable Entry: Y